

Appl. No.: 09/670,840  
Docket No.: 1248-0518P  
Reply to Office Action of November 13, 2003

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) An ink jet printer for making print on at least one recording paper, comprising:

a supporting axis; and

an ink carriage that reciprocates along the supporting axis, the ink carriage being adapted to be at least partially surrounded by the at least one recording paper and including ink heads each provided with an ink nozzle facing a different direction, such that printing is effected on the at least one recording paper simultaneously at more than one portion along a transportation direction in which the at least one recording paper is transported through a transportation path.

2. (currently amended) An ink jet printer for making print on at least one recording paper, comprising:

a supporting axis; and

an ink carriage that reciprocates along the supporting axis, the ink carriage being adapted to be at least partially surrounded by the at least one recording paper and including two ink heads each provided with an ink nozzle facing a different direction, such that printing is effected on the at least one recording paper simultaneously at two portions along a transportation direction in which the recording paper is transported through a single transportation path sequentially one by one.

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3. (currently amended) The ink jet printer for making print  
on at least one recording paper of Claim 2, further comprising:  
a supporting axis;

an ink carriage that reciprocates along the supporting axis,  
the ink carriage including two ink heads each provided with an ink  
nozzle facing a different direction, such that printing is effected  
on the at least one recording paper simultaneously at two portions  
along a transportation direction in which the recording paper is  
transported through a single transportation path sequentially one  
by one; and

nozzle distance adjusting means for adjusting a distance  
between said ink nozzles facing different directions with respect  
to the transportation direction, such that printing is effected at  
two preset recording portions on said at least one printing paper  
by said two ink heads each provided with said ink nozzle facing the  
different direction.

4. (previously presented) The ink jet printer of Claim 3,  
further comprising:

extendable guiding means for guiding the at least one  
recording paper through the transportation path between said ink  
nozzles facing different directions whether the transportation path  
is extended or shortened.

5. (withdrawn) The ink jet printer of Claim 2, wherein  
each of said ink nozzles is provided with a plurality of ink  
holes aligned in a line slanted with respect to a running direction  
along said supporting axis and the transportation direction of the  
recording paper, and

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said plurality of ink holes in one of said ink nozzles are shifted by half a pitch from said plurality of ink holes in the other ink nozzle as to intervals in at least one of the running direction along the supporting axis and the transportation direction of the recording paper.

6. (previously presented) The ink jet printer of Claim 2, wherein

first print data is printed by one of said ink nozzles and second print data is printed by the other ink nozzle, said second print data being different from said first print data.

7. (withdrawn) The ink jet printer of Claim 2, further comprising:

paper turnover means for turning over the recording paper in the transportation path between said ink nozzles.

8. (withdrawn) The ink jet printer of Claim 2, further comprising:

drying means provided in the transportation path for drying print made on the at least one recording paper.

9. (withdrawn) The ink jet printer of Claim 5, wherein said ink nozzle is provided for each color in case of color printing.

10. (previously presented) The ink jet printer of Claim 1, wherein said supporting axis is provided in a direction that intersects at right angles with the transportation direction of the at least one recording paper.

11. (currently amended) The ink jet printer of Claim 1, wherein said ink carriage has a front surface provided with a front ink nozzle and a back surface, opposing the front surface, provided with a back ink nozzle, and the transportation path is curved along the front surface and the back surface each outer surface of said ink carriage.

12. (currently amended) The ink jet printer of Claim 1, wherein said ink carriage has a front surface provided with a front ink nozzle and a back surface, opposing the front surface, provided with a back ink nozzle, and the transportation path is curved along the front surface and the back surface each outer surface of said ink carriage such that a distance between the front surface and the recording paper and a distance between the back surface and the recording paper are to have a substantially the same space therebetween.

13. (original) The ink jet printer of Claim 11, wherein the transportation path is curved substantially in a U-shape.

14. (currently amended) The ink jet printer of Claim 10, wherein at least one of said supporting axis and ink carriage is formed so as to be on an imaginary a virtual extension line of the transportation path extending toward said ink carriage.

15. (original) The ink jet printer of Claim 2, wherein an ink directing direction of each of said ink nozzles opposes each other.

16. (currently amended) The ink jet printer for making print on at least one recording paper of Claim 15, further comprising:

a supporting axis; and  
an ink carriage that reciprocates along the supporting axis,  
the ink carriage including two ink heads each provided with an ink  
nozzle facing a different direction, such that printing is effected  
on the at least one recording paper simultaneously at two portions  
along a transportation direction in which the recording paper is  
transported through a single transportation path sequentially one  
by one,

wherein an ink directing direction of each of said ink nozzles  
opposes each other, and

wherein the ink directing direction of each of said two ink  
nozzles is horizontal.

17. (new) The ink jet printer of Claim 1, further comprising:

a length adjusting roller provided parallel to the supporting axis and adapted to selectively move toward and away from the supporting axis to adjust a length of the transporting path between two portions at which printing is effected.

18. (new) The ink jet printer of Claim 17, wherein the length adjusting roller adjust the length of the transporting path between the two portions at least to a length of the recorded paper.

19. (new) The ink jet printer of Claim 2, further comprising:

a length adjusting roller provided parallel to the supporting axis and adapted to selectively move toward and away from the supporting axis to adjust a length of the transporting path between two portions at which printing is effected.

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20. (new) The ink jet printer of Claim 19, wherein the length adjusting roller adjust the length of the transporting path between the two portions at least to a length of the recorded paper.

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**AMENDMENTS TO THE DRAWINGS**

Attached hereto is one (1) replacement sheet(s) of corrected formal drawings that comply with the provisions of 37 C.F.R. § 1.84. This replacement sheet(s), which depicts Figure 7(b), replaces the original sheet depicting Figure (7).